

# Lessons Learnt from Chinese Housing Development the Case of Affordable Housing and Its Funding

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## Abstract

Dated back to the opening up policy, Chinese economy had been rising tremendously, coupled with achievement, though housing challenges across the country greatly arose. Under the traditional planned economy since 1949, entirely housing construction became the State responsibility. As a result of lack of finances, new housing production has not emerged while nation population on rise. till 1988 when Urban housing reform existed as proposed strategy of affordable housing for the ordinary households through the private housing market. However, the strategy faced numerous obstacles such as lack of second hands market, an undeveloped real estate profession, indistinct land and property and property regulation plus absence of proper property management support. Amid these obstacles, the lack of housing finance would appeared to be a vital problem. Government Introduction of housing provident fund (HPF) scheme in 1991 applied as right measures for curving housing funding problems, under the Housing development fun, all employees required to contribute a percentage of their incomes to housing funding problems and employers contributed a similar amount. individual workers Accounts were opened with Construction Bank of China. Currently workers allowed to withdraw their housing development savings at retirement period, instead their application for their housing development savings as homes purchases in housing market. This has been implemented to the letter in most cities in China, regardless of variations of operational schemes and architectural demands in consideration to geological that varies from locality to another [1]. applying an experiential research of the housing development savings Scheme in Shanghai as a case research, this paper reviews the role of the HPF in financing affordable housing expansion in most parts of China.

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## Keywords

Housing Finance, Chinese Economy, Housing Policy, Shanghai, China

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### 1. Introduction

Housing reform has been a critical element of the overall economic reforms in urban China from the mid-1980s onward. Since 1949, China as a socialist country with own characteristic, has adopted a welfare housing system where the production. However, construction activity is usually subject to more risk than other business activities because of its complexity particularly in coordinating a wide range of disparate and interrelated skills and activities. [2] Unlike a mere employer, the work unit provided almost all aspects of welfare including housing, medical care and education. This scenario has changed though excelled in the mid-1980s when housing reform was initiated in major Chinese cities. As early as the late 1970s, China decided to opt for economic reform by promoting market mechanisms within its socialist planned economy under rulership of Deng Xiaoping. The economic reform progressed well and gradually expanded to other non- production sectors avoiding the condiment in building industry. By the mid-1980s, state enterprises/work units began to shed their welfare responsibilities and concentrate on production activities. A crucial part of this development was economic reform associated with the removal of housing provision as employment welfare.

The individual salaries in the country continued to be low due to government and workers as results of heavy Appropriations and the social welfare to their employees. Wages in China remained very low because the government and work units provided heavy subsidies and social welfare to their employees. It is argued that although housing reform has brought significant changes to the housing provision system and improved many urban residents' living conditions, it has not entirely broken the traditional system. [3]. Economic reform obligatory subsidies and welfare could be gradually abolished. In 1998, Zhu Rongji, Premier of the Chinese State Council, proposed that the housing market would be a pioneer sector in the Chinese economy. Along with the reform of remuneration structures, people would be provided with better pay in exchange for taking care of their own housing needs. As shown in **Table 1**, the annual actual income per capita in Shanghai increased throughout the 1990s by 500%. The highest income group experienced a 700% increase during the same period. The outcome of these reforms changed housing from a kind of social welfare to a private commodity [4].

A series of housing reform policies aimed at transferring the accountability for housing provision from the State to the market have been proposed since 1988.

Numerous plans put in place solely owned by the state initiatives/work units to the occupants. Nevertheless, responses were not admirable as expected. Thus

**Table 1.** Urban household per capita annual income (unit: RMB) in Shanghai from 1990 to 2000.

Year	Annual Actual income per capita	Lowest income	Low income	Medium-low income	Medium income	Medium-high income	High income	Highest income
1990	2198.28	1404.12	1648.44	1851.84	2119.80	2487.60	2862.96	3468.36
1991	2502.84	1536.36	1867.08	2108.04	2450.76	2770.80	3299.28	4185.84
1992	3026.76	1785.12	2181.96	2519.16	2953.68	3460.08	3971.88	5044.08
1993	4297.44	2333.76	2891.04	3398.64	4037.16	4843.20	5919.48	7566.96
1994	5889.60	2985.60	3780.36	4578.84	5426.04	6478.92	8258.52	11,629.80
1995	7196.40	3506.64	4607.88	5431.80	6620.28	8029.08	10,065.00	13,838.16
1996	8191.41	4027.32	5170.08	6111.60	7551.84	9288.36	11,194.80	15,725.16
1997	8475.50	4097.12	5388.31	6495.21	7963.72	9693.32	11,892.47	16,041.56
1998	8825.26	4175.61	5657.81	6778.81	8166.49	10,050.26	12,190.82	16,602.66
1999	10,988.90	5681.37	6867.78	7984.53	9577.54	11,954.82	15,311.74	24,158.63
2000	11,802.40	6207.20	7656.35	8861.80	10,586.57	12,978.02	16,262.13	24,111.10

Source: Shanghai municipal statistics bureau, 2001.

was because of a discrepancy between affordability to urban dwellers and the price level of the commodity housing. Counting, housing units were still being allocated to the workers by state-owned enterprises (SOEs), which made housing reform extra difficult to achieve. After years of piecemeal urban housing reform, the Chinese Government adopted a general policy course for urban housing reform that required the transfer of responsibility for housing provision from the State to the market [5]. The main focus in the late 1990s was a shift to the operation level of providing financial assistance to the homebuyers. The principles associated with a Housing Provident Fund (HPF) Scheme previously adopted in Singapore, were considered by the Chinese Government and deemed to be applicable to China.

### 1.1. The HPF Scheme in Urban China

In early 1991, the Shanghai municipal government established its own HPF Scheme and subsequently introduced its housing reform policy in May, 1991. There were five key policy measures under the housing reform program:

- 1) Implement the HPF Scheme;
- 2) Increase rents and replace by wage subsidies;
- 3) Those who were allocated housing were required to purchase housing bonds;
- 4) Tenants can purchase state-owned housing at discount rates; and
- 5) Establish housing committees.

The HPF was adopted as the core component of the overall housing reform in Shanghai and it provided a fundamental and long term means to meet the housing needs of the workers without State subsidy. According to the Shanghai

Provident Fund Management Centre, there were three main objectives of introducing the HPF:

1) Provision of an effective means to promote the transformation of housing from welfare to commodity;

2) Financial support to increase housing production and to meet the housing need of those families in poor living conditions; and

3) The establishment of a housing system under which the State, work units and individuals would join together to provide finance for housing development. Shanghai was the first Chinese city to implement the HPF Scheme as a financial tool for housing reform that included a form of compulsory saving by employees. All employers and employees in Shanghai were required to contribute a percentage of the employees' salaries on a monthly basis to the "employees' account" in the HPF. Initially the percentage was set at 5% and subsequently increased to 7% in 1999. The savings under this Scheme were deposited in banks designated by the Shanghai Housing Provident Management Centre and the use of the fund was restricted to provide loans to enterprises for housing production; provision of loans directly to workers to purchase their own flats from the private housing market; and the provision of finance to enterprises or individual households for major housing repair works.

Since its implementation in 1991, the HPF Scheme has generally been regarded as successful in Shanghai, and it has provided a role model for other cities that soon followed suit by adopting similar HPF schemes. The HPF scheme in Shanghai continued to develop rapidly during the 1990s. By the end of 2002, the total amount of HPF accumulated in Shanghai was RMB 57.773 billion. During the year of 2002, the Shanghai HPF accumulated RMB 10.942 billion, which was 17.7% higher than 2001 (**Table 2**).

The increasing housing crisis and financial shortages in the late 1970s made the government re-think the over-centralized financial system which excluded market forces and the initiative of individuals and work units in the finance process. The restructuring of the housing finance system entails the development of financial institutions to lessen the government's control over housing finance, to widen the financial sources and to produce an adequate and stable flow of funds to the housing sector.

And housing providence finance numerated these three components in the operation of the HPF:

1) Housing Committee

The body responsible for the planning of residential housing in the city/province.

2) Provident Fund Management Centre

The body responsible for the operation and management of the Fund. Responsibilities vary under different approaches.

3) Designated Banks

Funds are deposited in a bank selected by the Provident Fund Management

**Table 2.** Urban household per capita annual income (unit: RMB) in Shanghai from 1990 to 2000.

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1994	5889.60	2985.60	3780.36	4578.84	5426.04	6478.92	8258.52	11,629.80
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1996	8191.41	4027.32	5170.08	6111.60	7551.84	9288.36	11,194.80	15,725.16
1997	8475.50	4097.12	5388.31	6495.21	7963.72	9693.32	11,892.47	16,041.56
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1999	10,988.90	5681.37	6867.78	7984.53	9577.54	11,954.82	15,311.74	24,158.63
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Source: Bureau of statistics of Shanghai municipal 2001.

Centre as the responsible body undertaken the task. By The People's Bank of China is entrusted institution for the determination of interest rates applicable, whereas Ministry of Construction and Ministry of Finance were overseeing the Scheme at strategic at national levels. Housing Committees determine policies at the local level, in connection with Management Centres and nominated banks are answerable for projects progress of the housing affordability. Virtually, fewer cities followed this Shanghai model and as a significance they established their self-administration practices. basically, two administration methods were adopted in China for the running of the HPF. Under the first approach, the Management Centre commissioned one or more banks to collect and to manage the fund. The Housing Committee would set up special accounts in the selected bank(s) that would be responsible for fund collection and keeping track of the flow of the fund under the supervision of the Management Centre. The Housing Committee had the ultimate mandate for deciding substances related to scheme. On the other hand, the banks were responsible for handling the deposits, lending and auditing as well as financial management. Every employee under the scheme had a specific deposit account with a designated bank. This approach was adopted in Shanghai and its neighboring cities such as Nanjing capital of Jiangsu Province.

In the second approach, the Administration Centre accumulates funds and renders management and financial supervision over applications of the fund, including the storage and retrieval of individual records. The Management Centres also had the responsibility to ensuring application applied for specified purposes. Hence banks were only custodian for issuing loans to employees. Replication been adopted in Smaller cities such Wenzhou and Guilin. Viewing that the first

approach requires the banks to participate in the scheme, thereby reducing the financial management burden on the government. Furthermore, in real sense Management Centre required to keep financial capitals records for work units and individuals and this creates overlap with the work of the banks. In the second approach, the relationship between the banks and the Centre was relatively simple. Since the Management Centre kept all the records, it *controlled management* possessed the ability to directly manage and control HPF. The relationship between the Housing Committee and the Management Centre was often not clearly defined and in some cities, the Centre was under the control of the Housing Committee or Housing Reform Leading Group (a different name of the Housing Committee in some cities). In Shanghai the Management Centre was under the Shanghai Housing Committee, whereas in Beijing the Management Centre was under the Beijing Housing Reform Leading Group. *In some cities, the Management Centre formed an integral part of the Housing Authority, which was often ambiguous in matters concerning decisions* [6]. Unfortunately, there was no evidence to determine which approach should be adopted, however most local governments had selected the first approach to implement their HPF Schemes. In an attempt to facilitate and standardise the administration, the State Council Housing Reform Leading Group (*as well as owner occupancy, and it called for housing finance reform suggested that local governments* [7] should adopt computer network systems and fund card network systems in managing the provident funds.

## **1.2. The Role of the HPF in Housing Supply**

Diminishing role of the state in direct housing production Before housing reform, work units and government were responsible for the production of new housing units and the maintenance of the existing housing stock for all employees. Housing units in the form of staff dwellings represented the largest component of the housing stock in Shanghai and this had imposed an extremely heavy financial burden on local governments. In the initial stage of urban housing reform, the focus was on increasing housing production by means of sharing the financial burden among the government, the work units and the individuals such as in the Comfortable Housing Program. The policy of allocation of staff dwellings continued to be implement during the 1990s and most of the funds, either from the State or generated by the work units themselves were directly used for new housing production. New housing units were subsequently converted into staff dwellings and either allocated or sold to eligible workers. run homes received funding from the government for buildings and fittings, as well as some staff costs [8]. It was apparent that although the role of the State in housing production had been diminishing, the work units continued to play a very significant role as the middle man between the producers of housing and the end users. Therefore, the concept of housing provision by staff dwellings had remained unchanged despite the introduction the urban housing policy reform

in 1988. The major change was in the source of finance for housing where the burden was shifted from the State Budget to the work units and the workers.

### 1.3. Increasing Role of Self-Raised Fund in Housing Finance

In Shanghai, investment in residential housing remained as a significant component of the city's total fixed asset investment. Since 1995 the total floor space of residential housing completed each year was more than 10 million-m<sup>2</sup>. This figure demonstrated the success of the urban housing reform in increasing housing production to solve the city's housing shortage. The significance of housing reform is not merely to release the heavy financial burden of SOEs, but also to reinvigorate China's economy. of their new recruits through open recruitment, as opposed to the average 62.7% across [9]. in pursuing economic growth in China. Investment in residential housing was RMB 425.9 million in 2000 representing 25.1% of the Total Fixed Asset Investment in Shanghai (**Table 3**).

Fund for the continuous high level of housing production was largely due to the continuous growth of domestic loans and fund-raising activities (**Table 4**). With the introduction of the urban housing reform, work units could no longer rely on the government for funding to construct quarters for their employees and therefore they were required to seek for alternative sources of finance. The Shanghai City Government initiated idea of HPF to ensure that a certain portion of the city's revenue was channelled to become capital for new housing production and the maintenance of existing housing stock. In practice, the HPF played a very significant role in financing affordable housing production in Shanghai. According to Zhang's study, By the end of 1966, HPF raised RMB 11.4 billion in Shanghai and provided RMB 8.4 billion in loans to work units for housing construction and RMB 2 billion in mortgage loans to 46,000 households for

**Table 3.** Urban housing investment and completed housing floor space in Shanghai (1990-2000).

Year	Investment in residential housing (100 million RMB)	As percentage of total fixed asset investment (%)	Floor space of residential housing completed (10,000 m <sup>2</sup> )
1990	26.25	13.4	421.94
1991	35.67	16.2	477.69
1992	44.21	15.7	543.48
1993	66.70	12.3	616.50
1994	289.06	29.8	873.57
1995	407.82	28.2	1268.90
1996	433.85	24.5	1509.48
1997	433.04	24.1	1684.20
1998	383.27	21.1	1624.03
1999	364.80	21.3	1532.81
2000	425.24	25.1%	1459.38

Source: Shanghai municipal statistics bureau, 2001.

**Table 4.** Investment in capital construction by source of funds and administrative relationship in china (unit: RMB 100) Year.

	By source of funds		By administrative relationship				
	State budgetary appropriation	Domestic loan	Foreign investment	Fund rising	Others	Central government projects	Local projects
1990	363.59	378.62	224.05	529.92	207.62	919.15	784.67
1991	348.45	527.07	239.96	746.73	253.59	1060.44	1055.37
1992	307.87	831.48	334.15	1242.92	296.24	1341.69	1670.96
1993	431.76	1117.55	456.15	1991.25	608.57	1834.90	2780.60
1994	434.57	1583.45	912.03	2820.48	584.48	2430.75	4005.99
1995	491.67	1646.24	1055.42	3121.86	899.98	2970.67	4432.95
1996	(524.38)	1938.86	1235.43	3778.83	965.00	3379.33	5231.50
	521.11	1937.76	1234.84	3752.32	956.86	3376.28	5194.50
1997	574.51	2239.88	1351.92	4432.24	1036.13	3858.22	6058.80
1998	1021.32	2814.36	1445.78	4870.26	1461.22	4122.92	7793.51
1999	1478.88	2972.04	1064.15	4857.15	1467.25	4046.79	8408.49
2000	1594.07	3586.35	852.18	5233.10	1396.78	4290.92	9136.35

Source: National bureau of statistics of China, 2002.

home purchase). The role of the provident fund in financing the Comfortable Housing Program.

While HPF was regarded as a continuous source of funding for housing production and consumption, the national Comfortable Housing Project provided the vital financial support to local governments in the production of housing for the ordinary families in China. The “Implementation Plan for National Comfortable Housing Project” announced by the State Council in the Ninth Five-year Plan (1995-2000) was first implemented in Shanghai in the form of the Comfortable Housing Project (the Project). The Project was intended to provide low-cost housing for the “households with housing difficulties” whose living area is less than 4 m<sup>2</sup> per person. The Project aimed at providing Comfortable Housing for 74,600 households by year 2000. To do so, a total of 3 million-m<sup>2</sup> of Comfortable Housing needed to be built. (Shanghai Municipal Statistics Bureau, 1995-2002, Shanghai Economy Year Book, 1996). Obviously, the implementation of such massive housing program required huge fund. It would be a huge financial burden to the Government if the Project was solely financed by her. Fund raised at the local level, in particular the HPF and loans from banks played a significant role in financing the Project.

In 1995 Central Government allocated a housing loan of RMB 300 million to Shanghai while the local government contributed a further RMB 450 million to implement the Comfortable Housing Project. The Construction Bank’s Shanghai Branch provided a housing loan of RMB 750 million and the HPF Scheme contributed a RMB 433 million loan to support the Project. The remaining funding for the project was from the housing offices and the work units themselves. The Project managed to produce 550,000 m<sup>2</sup> of comfortable housing for more than



13,000 households whose average living space were below 4 m<sup>2</sup> per person. Loans from the State reached RMB 300 million in 1996 with another RMB 450 million loans raised locally. The Project completed a total of 620,000 m<sup>2</sup> of Comfortable Housing by the end of 1996 assisted 30,200 households with housing difficulties to participate in home purchase (Shanghai Economy Year Book, 1996; Yearbook of Shanghai Housing Development Bureau, 1995-1996). Often gamble their savings to satisfy their aspirations for new commercial housing despite their aspiration [10]. The HPF Scheme could accumulate capital for housing construction from the work units and employees and would be an auxiliary means to provide housing units to the households as a short-term measure. In 1997 the Shanghai HPF Scheme provided a total of RMB 871 million loans to finance the Comfortable Housing Project. As a consequence, completed floor space under the Project in 1997 reached 710,000 m<sup>2</sup> (Shanghai Economy Year Book, 1998).

The Comfortable Housing Project followed the principle that the three parties i.e. the State, the work units and the individual should share the responsibility to solve the housing problems. Hence, under the Project, Central Government only provided loans as an initial source of financial assistance. Work units then had to raise capital to construct comfortable housing (low-cost housing) and individuals would then purchase housing units with loans from the provident fund and the banks. The success of the Comfortable Housing Project was supported by the rapid development of the HPF in Shanghai.

#### **1.4. The Role of the Fund Scheme in Housing Demand**

After years of housing reform, the Chinese Government considered promoting home ownership by individual families as a long-term strategy, which could revitalise the local real estate sector and fostered economic growth in the long term. Initially, the strategy adopted by the Chinese Government in housing reform was mainly concentrated on the production side aimed at producing low-cost housing for the poor. The Comfortable Housing Project was a typical example. In line with this strategy, the HPF in Shanghai played a significant role in financing comfortable housing production. In practice, the Shanghai Housing Provident Fund Management Centre acted as a developer and directly involved in affordable housing development. By the end of 1990s, the use of HPF in Shanghai had been shifted from the production side to the demand side. Providing low interest housing loan to subscribers became the major task of the HPF. Policy measures were formulated to stimulate housing demand. For instances, the repayment period of housing loan was extended from 15 to 20 years, and the down payment amount was reduced from 30% to 20% of the value of the property. The HPF also worked closely with major banks in Shanghai in providing “composite housing loans” to home buyers. There was also a rapid increase in individual home buyers since the mid-1990s. In the beginning of housing reform, it was normally the work units who either directly involved in housing

production or purchase housing units and re-allocated to their employees at subsidised prices. However the role of the work units as home buyers was gradually replaced by individual households. The percentage of individual home buyers in Shanghai had been increased to 70.3% in 1998 as compared with 47.9% in 1996 and 60% in 1997 (Shanghai Economy Year Book, 1999).

The promotion of a demand-led housing market was further enhanced by the end of 1990s.

According to policy announced in 1999, no state-owned work units were allowed to build or provide housing for their employees. Instead, workers would receive housing subsidies by work units and low-cost mortgages from the HPF Scheme. Work units were expected to divert funds formerly used to provide employee housing subsidies to workers for the purpose of purchasing their own homes. Each work unit was required to draft its housing subsidies plan. The new policy broadened the definition of what housing could be bought and sold. In the case of residents who had already purchased housing units from work units, the reform policy also widened the opportunities for them to sell. (Shanghai Economy Year Book, 2000).

Along with the success of the HPF, the role of the banks in providing housing loans to home buyers became more and more important. By the end of the 1990s, the Shanghai municipal government changed its strategy to encourage employees to use mortgage loans from the banks, as well as loans from HPF. With the development of mortgage loan provided by the banks and the increasing funds collected under HPF, the number of families using HPF to purchase their homes increased. In 1999, the Chinese Government called for a total termination of the allocation of housing to staff by work units. Consequently, there was a general shift of policy to use HPF to transfer the emphasis from production to consumption. Initially, HPF played a key role in providing fund for housing production particularly under the Comfortable Housing Project. By the end of the 1990s, the municipal government of Shanghai changed its policy by switching from loans to developers (for housing production) to giving loans to home buyers. The objective was to raise the effective demand for housing. The Shanghai Provident Fund Management Centre further raised the contribution rate from 6% to 7% commencing from July 1999. This would increase the amount of Fund to be collected and hence more home buyers could be financed by the Fund (Shanghai Economy Year Book, 2000). Interest rates charged on loans by HPF were lower than the mortgage rate provided by commercial banks. Therefore, potential home buyers preferred to use loans from HPF.

The Shanghai municipal government currently approves the adjustment of interest rates for housing loans under HPF in order to encourage households to borrow housing loans from other commercial banks. The aim of government is to reduce the borrowing pressure on HPF by involving more commercial banks in financing households for home purchase. Nonetheless, the interest rate charged by HPF for mortgages is still lower than the market mortgage rate and

this has resulted in continued heavy demands on HPF.

According to the Mortgage Units Director of the HPF Centre, applications for mortgages from the Centre have become increasingly popular. From January to May 1999, the Centre provided loans amounting to RMB 2.45 billion; however, receipts contributed only RMB1.31 billion. In July 1999, the Shanghai Housing Reform Fund was established to provide welfare housing maintenance using funding generated from the sale of state-owned housing, thus bringing in an additional RMB 2 billion of income to the HPF. The Director also stated that the Centre could obtain loans from commercial banks to raise extra funds because of the pressing need for low- interest mortgages.

### **1.5. Limitations of the Provident Fund**

Evidence collected indicates that the HPF Scheme is a feasible and appropriate measure for long-term affordable housing development in urban areas in China. It can generate effective demand as well as providing funding for housing production. Shanghai's experience in dealing with housing provision by means of the HPF Scheme can be taken as a good example for other major cities in China to follow. However, there are some limitations associated with the Scheme as stated in the following section.

### **1.6. Gap between Regions and Enterprises**

There are large gaps between wealthy and underdeveloped regions and also between wealthy and poor enterprises. The success of the HPF Scheme depends upon contributions from employers and employees. There are many instances where old inefficient state enterprises are unable to pay salaries for months and have no ability to make contributions to their employees' HPF. Shanghai is a leading commercial and industrial city and it enjoys some of the highest household incomes in China. The success of Housing Provident Scheme does not necessarily mean it will succeed in all other Chinese cities, especially those in the less developed regions where local GDP per capita is low.

### **1.7. Financial Burden to Enterprises**

The implementation of the HPF inevitably imposed a financial burden on enterprises as they are required to subscribe an equal amount contribution to the HPF as their employees. This might not be a major problem at the early stage of the HPF Scheme since enterprises obtain significant income by selling off existing housing units to employees. Most enterprises utilised funds from selling their flats to pay for loans under HPF. Inevitably this source of funding will diminish in time and will eventually be exhausted when all the housing units are sold. On the other hand, enterprises were put under pressure to raise the employees' wages under the new policy of wage reform to cash state welfare into wages. Wages in cash term will therefore continue to increase and likewise the enterprises' burden on the contribution to HPF will also increase. Hence it may be

difficult for some enterprises to meet the demands of these two requirements simultaneously.

### **1.8. Increasing Number of Unemployed Workers**

HPF mainly targets employees in urban areas in China. Those who are unemployed or laid-off are excluded from the Scheme. In the process of privatization and economic reform, it is expected that the number of laid-off workers will increase. Under the current situation, the unemployed workers will face a severe housing problem. They will no longer be allocated housing by work units as in the past and they have no HPF either. Thus the purchase of housing is outside the capacity of these social groups.

### **1.9. Problem of Inequality**

The operational challenges of rural financial intermediation are compounded by state development involvement of NGOs in running microfinance institutions. The HPF Scheme was operated on the basis of low interest rates both for deposit and loan. As a result, those who did not use the Scheme suffered from a loss in interest gained from their deposit in the Fund. In reality, it was always the better-off families who had enough savings to pay the down payment and therefore enjoyed the benefit of the low interest rate from the Fund. Those low income and poor families who were unable to purchase their homes but were required to contribute to the fund were in practice subsidizing the better-off families. As pointed out by Wang, The Provident Fund appears to be good idea to help the low-income families to save for housing. However, its impact is also limited to the better-off urban residents employed by the state sector, particularly the administrative and institutional organizations.

These organizations are supported by government fund through the budget [11].

Mismanagement and illegal utilisation of the fund The HPF was managed by the HPF Management Centres at the city level. However, the role of the Management Centres was unclear since they were operating more like a government body rather than an independent financial entity; hence they might not bear any legal liability if the HPF Scheme accumulated debt. Furthermore, the relationship between the designated banks and the Management Centres was also confused. While there are rules governing the use, the control of the actual use of the Fund at the operational level was rather losing. There were cases that HPF was not under proper management. Some local government were found to use the HPF for other non-housing projects. For instance. A report indicated by local government illegally used more than RMB 200 million of HPF to construct the airport as well as government offices and a commercial building.

### **1.10. Undeveloped Banking System**

The amount of loan an individual could obtain from the HPF is in proportion to

the amount of his or her contribution to the HPF. Hence HPF loan alone might not be enough to support home purchase. In practice the HPF worked closely with commercial banks to offer “composite loan”—a combination of HPF loan at low interest rate and top-up loan from commercial bank at market interest rate. The commercial banking sector in fact has been getting more significant in financing individual home buyers with individual commercial banks competing severely for mortgage business, as individual housing loan was generally regarded by the banks as less risky (Shen, 2000). However, the commercial banking sector in China is still undergoing major reform. In particular banks were lack of knowledge on risk management associated with the fluctuation of the property market. Other problems such as the relatively immature property valuation profession also hinder the development of the banking sector as a fundamental source of housing finance. In short, the problems with the Chinese banking system had an impact on the credibility and success of HPF. the market for mortgage and mortgage- backed securities in China was still at its infancy stage. The absence of a variety of housing financing might affect the affordability of individual home buyers.

## 2. Conclusions

The outcome of this study supports Jiangsu province research Grant of the Southeast University under grant meet housing needs by developing a private housing market is accurate despite the identification of associated problems. the fundamentals of a sound and effective private housing market is having access to adequate finances, for both developers and home buyers [12]. In the last decade, there has been a mismatch between supply and demand in the private housing market in China. Initially most developers rushed to build high price housing units targeting Chinese buyers outside mainland China, namely, those from Hong Kong, Taiwan and Southeast Asia, thus creating an over supply of expensive homes.

Local urban dwellers were not able to afford the purchase of residences and most relied on their work units to cater for their housing needs. This scenario changed dramatically in 1999 when the Central government announced the termination of the housing allocation system by work unit, thus ending the contradictory policy of encouraging home ownership on the one hand and continuing housing allocation on the other. From 1999 onwards, urban dwellers had to be responsible for their own housing requirements. The Chinese government recognized, categorized delinquent of insufficient funding for affordable housing development and launched the Comfortable Housing Project by injecting State funds to facilitate and to lower the cost of affordable housing by mass population. Nationally recognized consortium established in response to [13] The strategy was to join central government, local governments and work units together in the task of meeting the workers’ housing needs. In the case of Comfortable Housing projects, central government, local governments and relevant

work units were each responsible for 1 of the funding. These projects were successful in promoting affordable housing development and channeled resources to produce more basic housing units aimed at ordinary families at the local level.

This study has provided an account of the financing strategy adopted by the Shanghai government to tackle the provision of housing and related issues pertaining habitation and housing for the general public by means of the HPF Scheme. The Scheme has been successfully implemented by concerned parties. HPF together with the funding allocated from the State under the National Comfortable Housing Project has successfully increased housing production and has provided to workers with housing need. With the total abolition of housing allocation by 1999, HPF subsidized by stimulating housing claim by loaning workers with housing loans at low interest rates for the purpose of affordability. HPF however not able to help those state-owned enterprises with financial difficulties since they were not even able to pay the workers' wages, let alone contribute to the Scheme. Additionally, jobless workers excluded from HPF hence could not receive benefit. With further improvement of state-owned initiatives, it is predictable that the number of jobless workers in China will rise. therefore, significant of China considers the development of a comprehensive supported rental housing program, similar to the public rental housing program in Hong Kong, to provide basic housing for these families.

Moreover, the success of the HPF deepens on the overall development of the banking system in China [14]. Since the objective of the paper is the review the role of the HPF in financing affordable housing development in China, issues concerning the reform of the banking system in China, which is extensive in nature, will be dealt with separately by a future paper.

To conclude, although the short falls associated with the Scheme, yet an effective housing finance model seriously considered and adopted by other major cities in China that might face similar housing problems in the coming years. Further study is needed to closely examine these problems in order to make HPF a more effective means of financing affordable housing development in China.

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